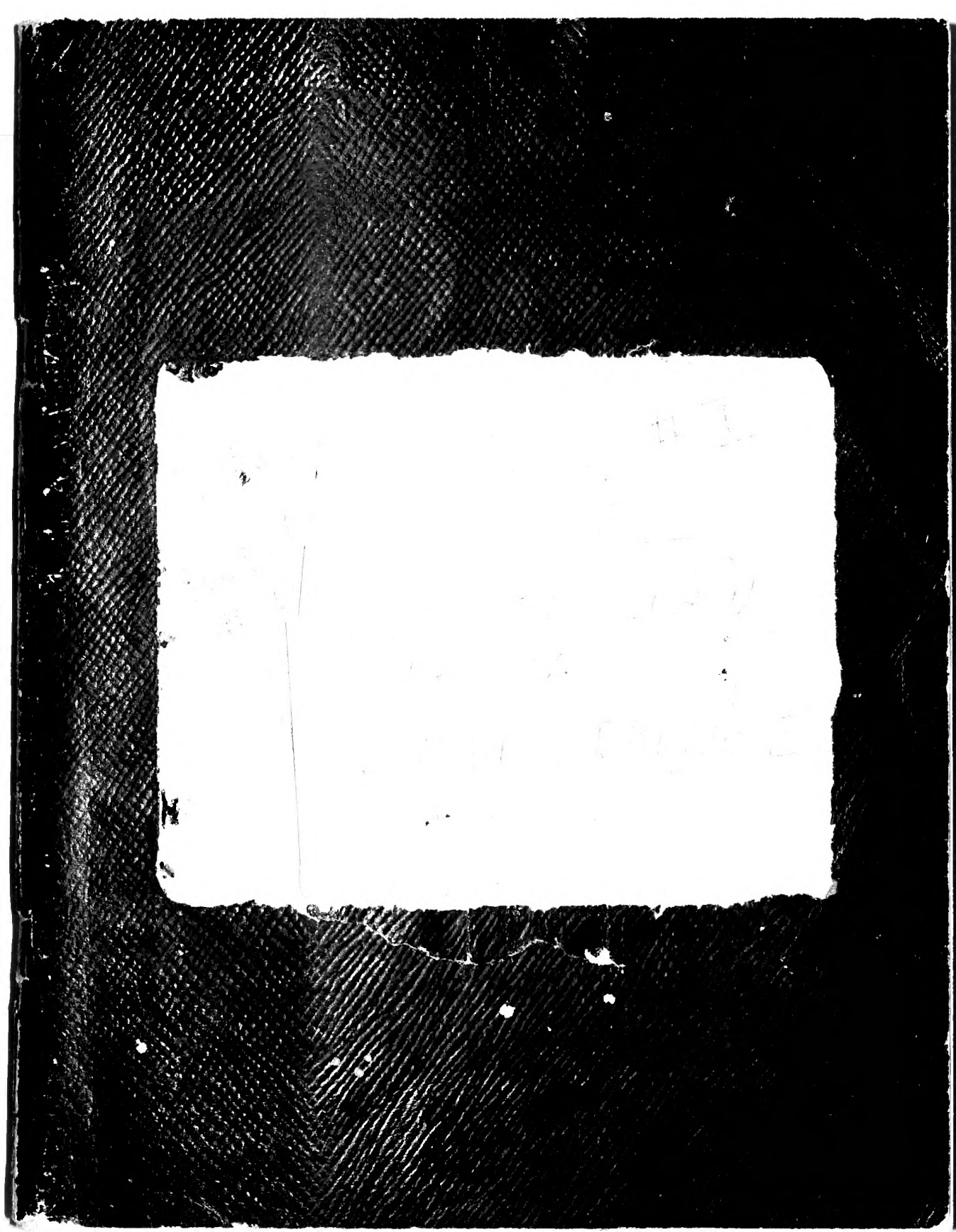
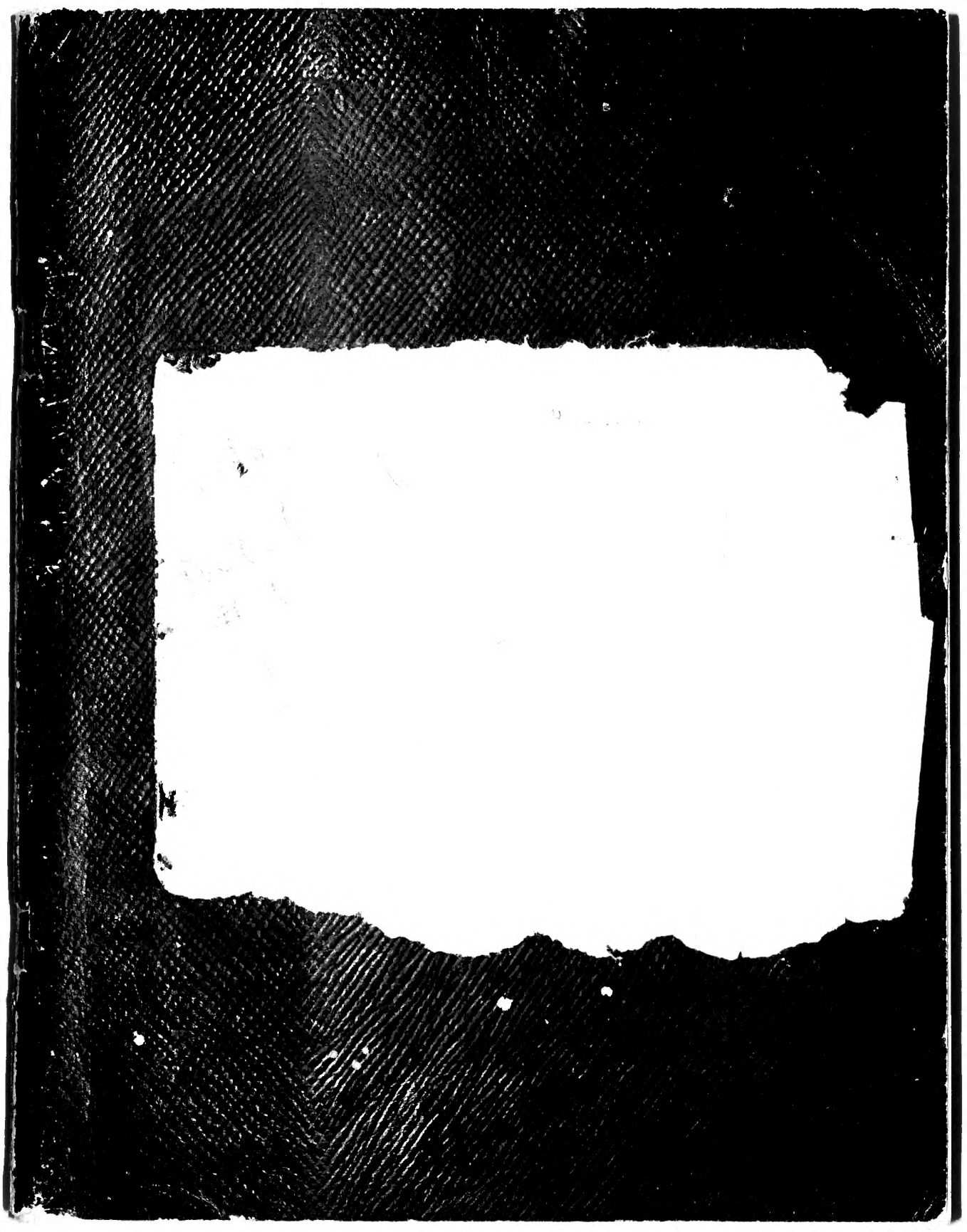
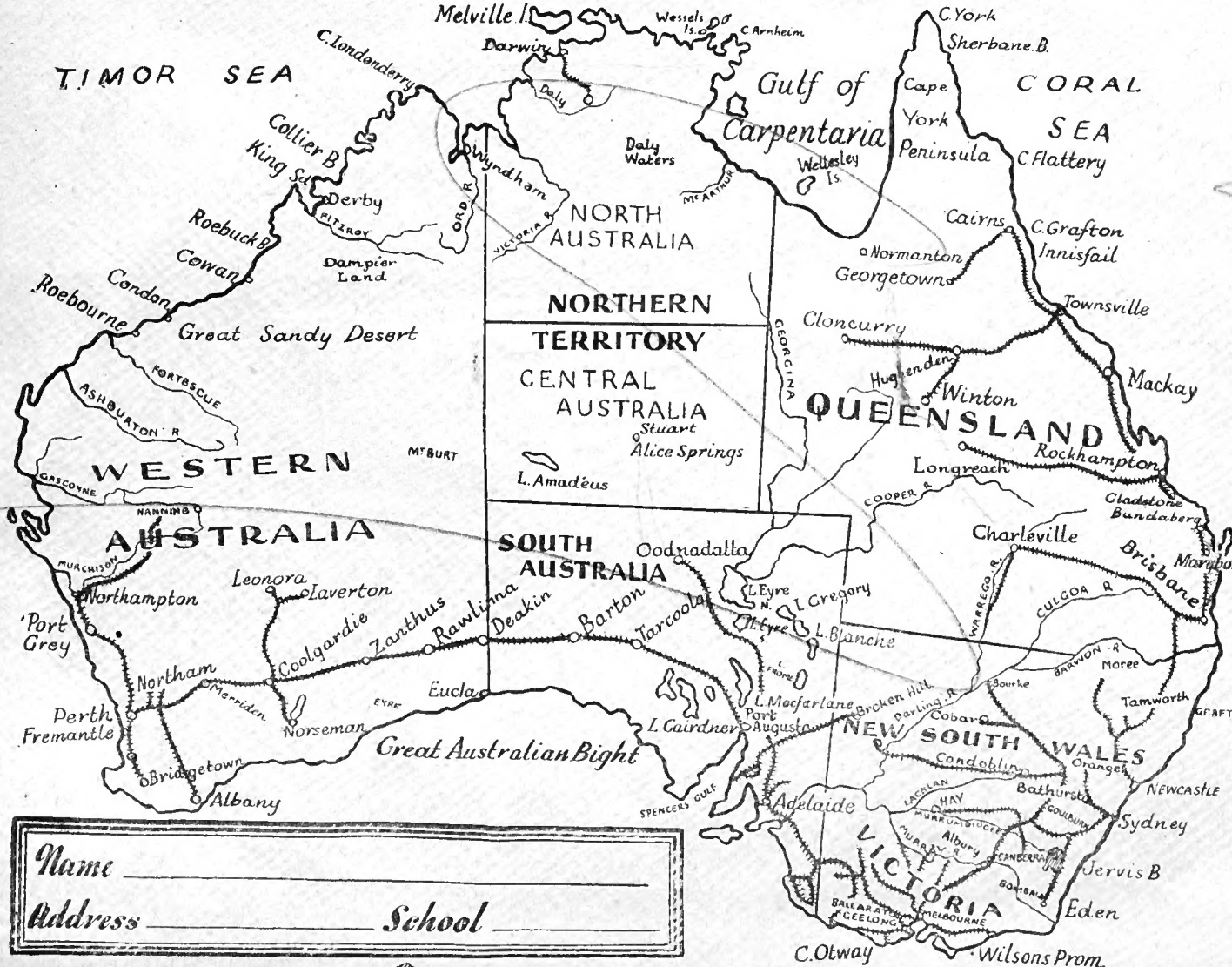






Some Mammals in back of book.
Tag No. cat. Bats pumpelly

Southern New Hebrides Wogs.

Tanna Is.

~~No 1. Small vial ants. General native name for ants in the White Sands dialect is MŬLLA MŬLLA (same as is be of Mull in Great Britain) name for this special ant is~~

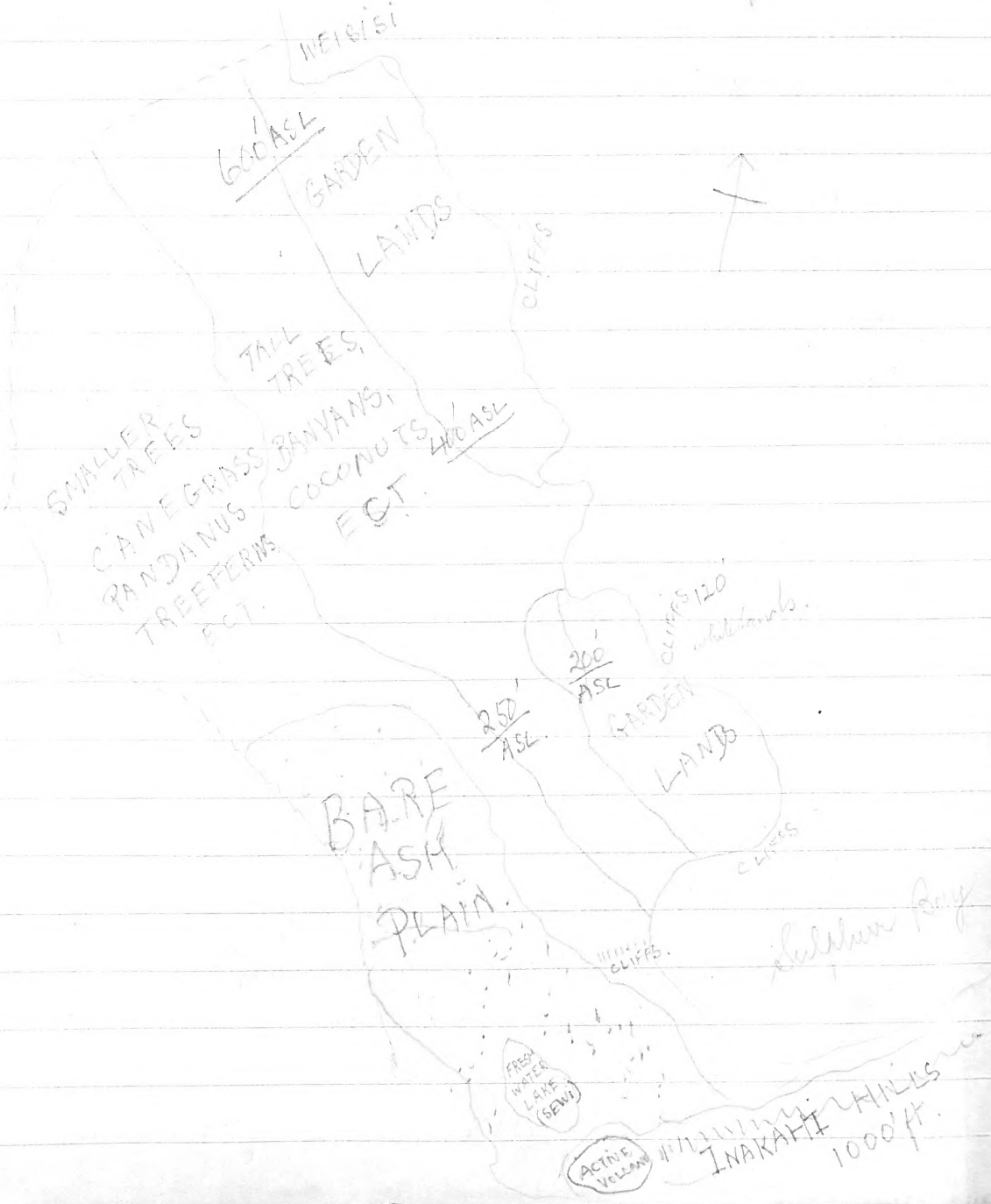
WHITE SANDS ~~White Sands where these ants were taken~~ is all an area of volcanic ash & sand, very porous & consequently dry with no surface water nearer than a fresh water lake 2½-3 miles inland at the foot of the active parasitic volcanoe 1000' ft high. The vegetation except on the ash plain close to the volcanoe is luxuriant, this only being possible because of the good rainfall of 120" per annum as the area lies on the weather side of the island at the foot of 3000' hills which cause a good precipitation. The vegetation is in 3 distinct bands (1) Native garden lands near the coast composed of garden areas in use, ones a year old with some scrub, grass ect in them & others 3, 4 & 5 years old of various sized scrub, small trees & shrubs, with larger fruit trees ect along edges of gardens & roads. Fruit trees are ~~amongst others~~ bread-fruit, many figs, few banyans, nut trees, fiji plumb, mango, rose apple, coconuts, pandanus, oranges, mandarines, limes & lemons, horse chestnuts (wild pacific), garden crops are yam, manioc, sugar cane, native cabbage (spinach), sweet potatoes, a little fiji taru, & corn. The scrub-

*overlaying volcanic basalt lava black & red, at a depth of from 100 ft in valleys to 250 ft & more. No clay in area except at fresh lake.

scoria ect, tuff cliff along sea margins*

White Sand area

Art to scale & approximate only.



trees are of many kinds with a good deal of brou or bastard cotton. 2nd area inland is made up of large trees, many banyans ect with many fruit trees, + coconuts as in garden land areas, a lot of secondry height trees + a thin underbrush of scrub, ferns ect. Natives run their pigs in this area which also assists to keep underbrush down. 3rd area inland is composed of fewer + lower trees with much canes grass, pandanus, + tree ferns, these three finally predominating on the edges of the ash plain at the foot of the volcano. see rough map opposite page.

Vial NO 1. ✓ ANTS Native general name for ants is MŬLLA MŬLLA. short U as in isle of Mull, British Isles) the especial name for this ant is It is generally found in the dry sticks of hollow tubed plants such as wild kava (pepper mysticum family). cane grass + in hollowed limbs of trees under bark ect. It is very common. I believe it attacks white ants where it can get at them + often makes it own home in old white ant (termites) nests. (Any strange insects in the vial have got mixed in the larger catching bottle)

VIAL NO2 ✓ (small size)

Assorted small spiders

Small many spider yellow. common in bushes + cane grass often completely covering small bushes or mass of same with their webs. favours cane grass + close stemmed or leaved bushes.

Other spiders found in numerous places under bark, in small funnel webs in holes in trees, open webs on bushes ect. all common in area.

VIAL NO3. ✓ medium size.

Jag NO8. mushrooms always found in White Sands area

29th September 1936.

VIAL NO. 4 large size

Tag No 9. ✓ Scorpions, found under loose bark of many trees in
29/9/36. the area, especially favours the heads of coconut palms
where it ~~to~~ lives at the bases of the palm fronds + under the
cloth like fibre which is found in coconut tops. NB.

centipedes. common under rotting logs, stones ect, appears
harmless as it doesnt sting natives hands when catching.
N.B. natives catch this by hand + it appears incapable of
stinging them.

Ear wig common everywhere, especially in bunches of
bammanas ect.

Loose. Miss spiders ect. ants ect found found during
Sept. Oct. + Nov. All white sands area.

vial. Large bottle ~~Jag~~ No. 5.

Collected white Sand area.

Jag No 10.

Collected 29th September 1936.

1 Gecho lizard + egg of lizard.

The Gecho lizard is called GECKOU + is greatly feared by the majority of natives who will not handle it. Strangely they can give no real reason for their fear except "skin be no good, hand be no good, be cold" meaning the feeling of the suckers in the feet. Personally I believe it has been a superstitious secret society of previous inhabitants which has been overlaid + forgotten by the later Polynesian conquerors on the island but is greatly feared still although the reason is lost. The lizard is common everywhere in hollows under bark, under logs, in thatch of houses in coconut palm heads ect.

1 large green stick insect. Common on cane grass coconuts, lantana ect. Is eaten by the natives. Often seen attached by a leg in their hair + thus kept alive till eaten.

October very dry month.
Little rain between October 1st +
Nov. 18th.

1

Vial 5. cont

Tag 11. Numerous bryards found in White Sands area between Oct 1 and 31st, 1936.

Tag 12 scentipedes found White sands area during October 1936.

Loose missinenioris found White Sands Oct 1936.

Tag 13 Mass of Ants, beetles, spiders, mails crickets, slugs ect. ect. collected by a native in Area near White Sands. Oct 21, 1936. (mostly in garden lands.

Tag 14 Principally Ants. Missel. White Sands November 1936.

Tag 15 28/11/36. insects vomited by Collocalia vanchorcensis when shot, while feeding on wing at sunset. 28th November 1936

Tag 89. wood grubs found in rotting log, White Sands, East Tamna, 1st Dec 1936

Tag 88 Missel. wog collected Garden lands area 200 ASL. fine sunny weather after long dry spell 4 weeks White Sands East Tamna, 3rd December 1936.

6

anything loose in this vial is from White Sands Tanna. New Hebrides

(Cont) Vial 5 large bottle.

Tag 16 White ants, found white Sands, 4th Dec. 1936

Tag 92. Snails found in stomach of Turdus (thrush) Efromanga. see field book birds for exact date.

Tag 86. Gecko Lizards found in house. Efromanga Is.

Tag 85 Lizards found in open grassland area, 8-1000' ASL. Open grassland plateau with numerous patches hardwood scrub + scrubby gullies. W side of Island. North Dillons Bay area, Efromanga, New Hebrides.

Tag 84 Misc. Spiders, ect. generally large. Found open grasslands plateau 8-1000 ASL. Open grassland plateau with numerous patches hardwood scrub + scrubby gullies. North Dillons Bay. Efromanga Is. Southern New Hebrides

Tag 83 Ditto above but smaller insects Ants ect. Same plac + area.

15-30th MAY. 1937

FULL JAR.

Vial 6. large tube. ✓

Miscellaneous beetles & insects White Sands Area
Collected November 1936.

Large bottle vial 8.

Tag NO 82. Lizards found on Trech around Erromanga. 24-31st May 1937. Large Gecko inhabits coconut palm tops. Not found in houses.

Tag 80. Snails found on trech around Erromanga Island, all levels from sea level to 3000' ASL. anywhere where there is a ferny or dense underbrush. 24-31st May 1937.

Tag 79. Insects found on trech all around Erromanga from sea level to 3000' ASL. 24-31 May 1937. Missel.

Tag 49 Residue left in bottle from above.

Birds

~~Tag 77. Lucidus layardi shot Aniwa Is. March 1937~~

~~Got by boys data not available at time of despatch.~~

~~Tag 78 2. Eudanymis shot Aniwa March & April 1937.~~

Tag 77. Lizards found on Aniwa Is. March, April, 1937. Small low coralline uplift island 4-5000 acres mostly hardwood scrub & native garden lands. (continued)

Vial 8 large bottle.

Much introduced Queensland cedar trees. Normally tall forest. Greatest elevation on island 130 ft ASL.

Jag 78. Insects found on Aniwa March-April 1937. as above description.

Southern New Hebrides.

Jag 76. Ants + insects found Aniwa Is. March + April 1937. Southern New Hebrides.

Vial 9

Mammals + birds.

Mamals see tags numbers at back of this book.

birds.

Tag 28.
Lucidus layardi.
shot Aniwa April 1937.
No data to hand at time of despatch.
Shot by native.

Tag 197.
2 Eudanymas shot on Aniwa Is.
March April 1937.
Shot by boys no data to hand at time of Despatch.

Tag 17. Bat caught white Sands, East Tanna.
(SP) put in Erromanga bottle. 4th Dec, 1936 Fine sunny rain at night
switched with branch in native garden 7 P.M.

Tag 99 3 Bats caught on wing at Dusk 14th Jan 1937.
Moonsoonal dull showy weather, in open
grassland paddock numerous trees about
(parkland) 120 ASL near sea coast. East
side Tanna island, (White Sands) Southern
New Heb. West. Pacific.

Tag 81 Bat caught on wing at dusk flying over
native compound 1200' ASL. Bunbed Bay
SW Erromanga Is. Southern New Hebrides.
30th May 1937.

ARITHMETICAL TABLES

Numeration Table.

Units	1
Tens	12
Hundreds	123
Thousands	1,234
Tens of Thousands	12,345
Hundreds of Thousands	123,456
Millions	1,234,567
Tens of Millions	12,345,678
Hundreds of Millions	123,456,789

Sterling Money Table.

4 Farthings	1 Penny d.
12 Pence	1 Shilling s.
2 Shillings	1 Florin
2 Sh. & Sixpence	1 Half Crown
5 Shillings	1 Crown cr.
10 Shillings	1 Half Sov.
20 Shill'gs	1 Sov. 1 Pound £
21 Shillings	1 Guinea

Arithmetical Signs.

\+ Plus; Sign of Addition
— Minus; Sign of Subtraction
× Sign of Multiplication
÷ Sign of Division
= Sign of Equality
: : : : Sign of Proportion
° Degree; ′ Minute; ″ Second
∴ Therefore; ∵ Because

Troy Weight.

FOR GOLD, SILVER AND JEWELS.

24 Grains	1 Pennywgt. dwt.
20 Pe'nywgts.	1 Ounce oz.
12 Ounces	1 Pound lb.

Apothecaries' Weight.

FOR MIXING MEDICINES.

20 Grains	1 Scruple scr.
3 Scruples	1 Drachm dr.
8 Drachms	1 Ounce oz.
12 Ounces	1 Pound lb.

Avoirdupois Weight.

FOR ALL GOODS EXCEPT GOLD SILVER AND JEWELS.

16 Drachms	1 Ounce oz.
16 Ounces	1 Pound lb.
14 Pounds	1 Stone st.
28 Pounds	1 Quarter qr.
4 Quarters	1 Hundr'dwht. cwt.
20 Cwt.	1 Ton tn.

Hay and Straw Weight.

36 lb. Straw	1 Truss
56 lb. Old Hay	1 Truss
60 lb. New Hay	1 Truss
36 Trusses	1 Load

Long or Lineal Measure.

12 Lines	1 Inch in.
12 Inches	1 Foot ft.
3 Feet	1 Yard yd.
2 Yards	1 Fathom f.
5½ Yards	1 Pole or Perch
40 Poles	1 Furlong fur.
8 F'rlongs or 1760 Yds.	1 Mile

Cloth Measure.

2¼ Inches	1 Nail
4 Nails	1 Quarter of a Yard
4 Quarters	1 Yard

Solid or Cubic Measure.

1728 Cubic Inches	1 Cubic Ft.
27 Cubic Feet	1 Cubic Yd.
24¾ Cubic Feet	1 Solid Perch mason's work
12 Cubic Feet	1 Solid Perch brick work

Imperial Heaped Measure.

	Avoird. of Water.	lb.
8 Gallons	1 Bushel	80
3 Bushels	1 Sack	240
12 Sacks	1 Chaldron	2880

Imperial Dry Measure.

		Avoird. of Water. lb.	oz.
2 Glasses	1 Noggin	0	5
3 Noggins	1 Pint	1	4
2 Pints	1 Quart	2	8
4 Quarts	1 Gallon	10	0
2 Gallons	1 Peck	20	0
4 Pecks	1 Bushel	80	0
8 Bushels	1 Quarter	640	0

Square Measure.

144 Square Inches	1 Square Ft.
9 Square Feet	1 Square Yd.
30¼ Square Yards	1 Square Pole
40 Square Poles	1 Rood
4 Roods	1 Acre

Table of Motion.

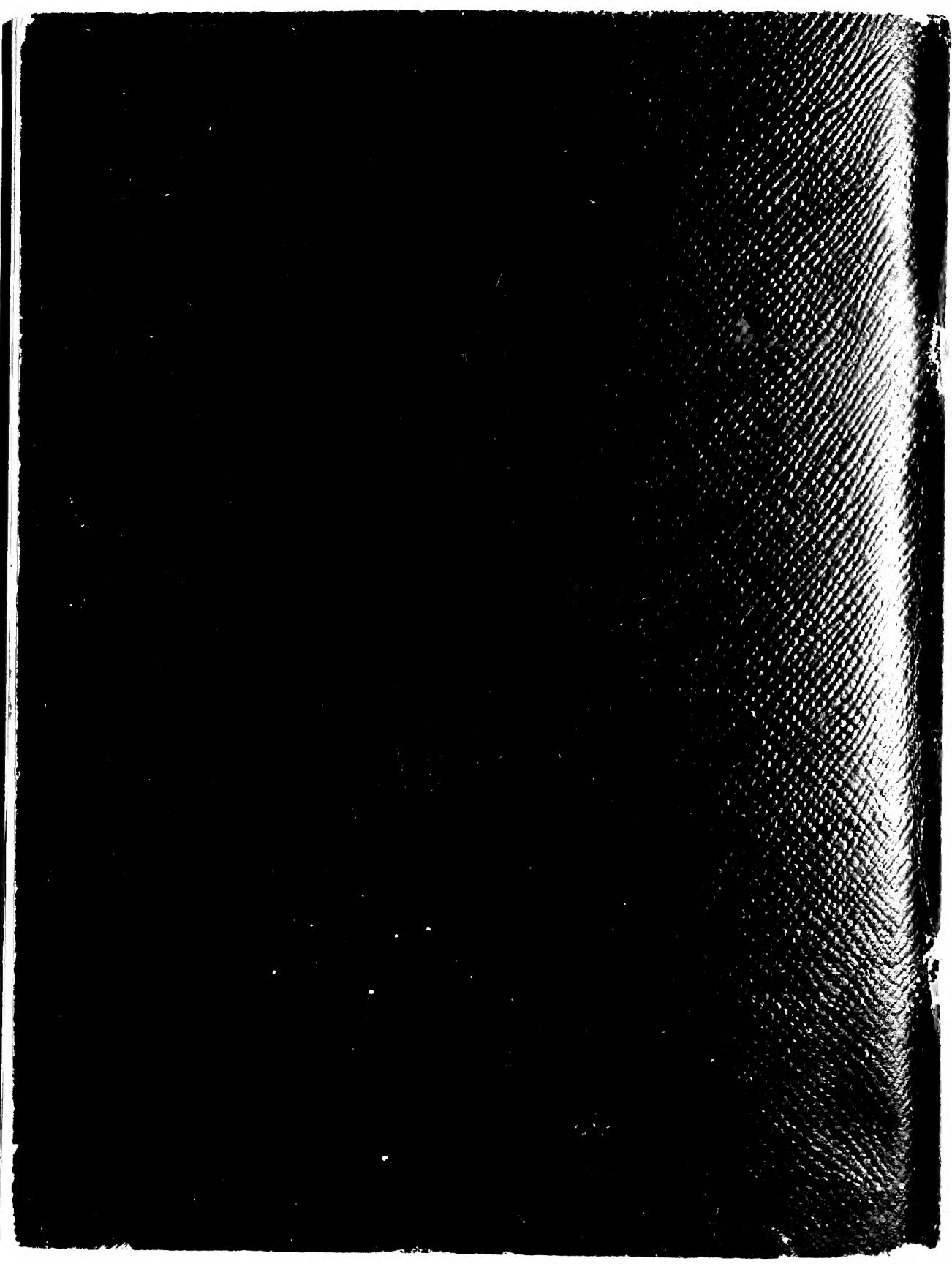
60 Seconds (″)	1 Minute
60 Minutes (′)	1 Degree
30 Degrees (°)	1 Sign
12 Signs or 360°	the circle of the earth

Table of Time.

60 Seconds	1 Minute
60 Minutes	1 Hour
24 Hours	1 Day
7 Days	1 Week
4 Weeks	1 Mouth
365 Days	1 Year
366 Days	1 Leap Year
52 Weeks	1 Year
12 Calendar or 13 Lunar Months	1 Year

Days of the Month.

Thirty days hath September,
April, June and November,
All the rest have thirty-one,
Excepting February alone, [clear
Which has but twenty-eight days
And twenty-nine in each leap year.

MULTIPLICATION TABLE.

Twice	3 times	4 times	5 times	6 times	7 times	8 times	9 times	10 times	11 times	12 times
1 are 2	1 are 3	1 are 4	1 are 5	1 are 6	1 are 7	1 are 8	1 are 9	1 „ 10	1 are 11	1 are 12
2 „ 4	2 „ 6	2 „ 8	2 „ 10	2 „ 12	2 „ 14	2 „ 16	2 „ 18	2 „ 20	2 „ 22	2 „ 24
3 „ 6	3 „ 9	3 „ 12	3 „ 15	3 „ 18	3 „ 21	3 „ 24	3 „ 27	3 „ 30	3 „ 33	3 „ 36
4 „ 8	4 „ 12	4 „ 16	4 „ 20	4 „ 24	4 „ 28	4 „ 32	4 „ 36	4 „ 40	4 „ 44	4 „ 48
5 „ 10	5 „ 15	5 „ 20	5 „ 25	5 „ 30	5 „ 35	5 „ 40	5 „ 45	5 „ 50	5 „ 55	5 „ 60
6 „ 12	6 „ 18	6 „ 24	6 „ 30	6 „ 36	6 „ 42	6 „ 48	6 „ 54	6 „ 60	6 „ 66	6 „ 72
7 „ 14	7 „ 21	7 „ 28	7 „ 35	7 „ 42	7 „ 49	7 „ 56	7 „ 63	7 „ 70	7 „ 77	7 „ 84
8 „ 16	8 „ 24	8 „ 32	8 „ 40	8 „ 48	8 „ 56	8 „ 64	8 „ 72	8 „ 80	8 „ 88	8 „ 96
9 „ 18	9 „ 27	9 „ 36	9 „ 45	9 „ 54	9 „ 63	9 „ 72	9 „ 81	9 „ 90	9 „ 99	9 „ 108
10 „ 20	10 „ 30	10 „ 40	10 „ 50	10 „ 60	10 „ 70	10 „ 80	10 „ 90	10 „ 100	10 „ 110	10 „ 120
11 „ 22	11 „ 33	11 „ 44	11 „ 55	11 „ 66	11 „ 77	11 „ 88	11 „ 99	11 „ 110	11 „ 121	11 „ 132
12 „ 24	12 „ 36	12 „ 48	12 „ 60	12 „ 72	12 „ 84	12 „ 96	12 „ 108	12 „ 120	12 „ 132	12 „ 144